

IV. AMENDMENTS TO THE DRAWINGS

--- Replacement and annotated mark-up drawing sheets for amended figures showing the amended figures, if any, are attached at the Appendix hereto. Each figure is in compliance with 37 C.F.R. § 1.84. An explanation of the changes, if any, is set forth below in this “Amendments to the Drawings” section. Replacement drawing sheets are identified in the top margin as “Replacement Sheet.” Any replacement drawing sheet including amended figures includes all of the figures appearing on the immediate prior version of the sheet. Any annotated drawing sheets, if the same are required by the Examiner, are identified in the top margin as “Annotated Marked-Up Drawings.” Any deleted figure is noted by an instruction to delete the figure. Any corresponding amendment to the specification necessary to be made because of an amendment to the drawings in this section is made in the corresponding “Amendments to Specification” section.

- THE DRAWINGS OF THE PATENT IS HEREBY AMENDED AS SET FORTH BELOW:
 - *No Amendment Made to the Drawings*
 - *Attachments: None*

V. REMARKS/ARGUMENTS

- STATUS OF THE CLAIMS

Claims 1 and 4 - 24 are pending in this application. Claims 2 and 3 have been previously cancelled. Claims 5, 7 – 13, 15, 17 -21, and 24 are as in the original filing.

- OBJECTIONS

- OBJECTIONS TO CLAIMS AND SPECIFICATION

- Examiner's Stance

No objections have been raised by the Examiner.

- Applicants' Response

N/A

- REJECTIONS

REJECTION UNDER 35 U.S.C. §102(b)

- Examiner's Stance

The Examiner has rejected claims 22 – 24 under 35 U.S.C. §102(b) as being “fully” anticipated by JP 55-079441 to Karasawa *et al.* The Examiner asserts that JP55-079441 to Karasawa *et al.* teaches in example 3 the use of methylene blue in PVA together with an electron donative amine, specifically triethanolamine. He states that polymeric amine as donative electron agents are shown on page 3 of the reference, particularly formulae VII and VIII. He indicates that such compositions are taught as useful for recording information.

The Examiner contends that the blue form of methylene blue “is known to inherently absorb strongly at 650 nm as evidenced by U.S. Patent No. 5,815,484 to Smith *et al.* which he states indicates the dye is useful for DVD lasers. The Examiner argues that the chemical

environment attendant to the dye would be expected to be minimal in respect of the absorption given the broad absorption of the thiazine dyes.

- Applicants' Response

Applicants respectfully traverse the rejection of claims 22 – 24 under 35 U.S.C. §102 (b) once more base in part on the argument that each element of the claim embodiments is not found in the prior art of reference.

Applicants respectfully find themselves in a uncomfortable position. Clearly the Examiner has ignored the law of anticipation, and the need to find every element of the prosecuted claim in the reference itself. Instead the Examiner makes unsupported statements that the title recording material of Karasawa *et al.* includes an optical disc, that even though the Applicants' note at paragraph 15 that methylene blue did not absorb in the recited range of the claims in a typical DVD coating, that a shift of methylene blue would be only "a few nm due to the chemical environment," and that even though methylene blue was not found by the present inventors to fit within the scope of the claim, that the methylene blue of Karasawa *et al.* teaches the dye compositions of the claim. Respectfully, the Examiner utterly fails to demonstrate anticipation in failing to point out SPECIFIC disclosure of the elements of the claims in ONE reference.

As anticipation requires that all of the limitations of a claim be found in a single art of record, respectfully amended claims 22 - 24 cannot be said to be anticipated by JP 55-079441 to Karasawa *et al.*

REJECTIONS UNDER 35 U.S.C. §103(A)

- Claims 22 – 24 (FIRST OBVIOUSNESS REJECTION)
 - Examiner's Stance

Although indicating above that claims 22 – 24 are anticipated by JP 55-079441 to Karasawa *et al.*, the Examiner also indicates that the reference makes OBVIOUS the claim. Without specifically showing how the claim AS A WHOLE is made obvious to one of ordinary skill in the art, the Examiner simply states with respect to the amines disclosed in JP 55-079441 to Karasawa *et al.* could be used "with a reasonable expectation of forming a

useful optical recording medium based upon the disclosure of equivalence.” The Examiner also notes that the “the reference teaches the formation of a colored image.”

- Applicants' Response

Applicants respectfully traverses the rejection of claims 22 – 24 under 35 U.S.C. §103(a) as being patentable over JP 55-079441 to Karasawa *et al.* in part on the argument that one of ordinary skill in the art would not find Applicants' asserted claim obvious.

The Examiner's entire premise rests on the notion that the compositions of Karasawa *et al.* would lead one to the compositions of the claims. The Examiner's Office Action, however, makes it entirely unclear why the Examiner believes this to be true. JP 55-079441 to Karasawa *et al.* simply does not teach or suggest that the polymeric coating can affect activation of the compounds in the specified wavelength range. Nor does it suggest nor make obvious why absorption and activation in these wavelengths might be useful. The dye substance pointed out by the Examiner, viz. methylene blue, simply was not found by the Applicants to work in the typical DVD coating as set forth at paragraph [00015] of the specification. Where is the obviousness?

- Claims 22 – 24 (SECOND OBVIOUSNESS REJECTION) and 4 – 14
- Examiner's Stance

The Examiner continues his rejection of claim 22 – 24 under 35 U.S.C. §103(a), and adds claims 4 – 14, finding the claims unpatentable over JP 55-079441 to Karasawa *et al.* in light of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960). The Examiner asserts that the spectra of such metachromic dyes was “more than 150 nm wide and centered about 610 – 650nm.” The Examiner further asserts that it would “have been obvious to use other alkyl groups ... in place of at least one of the N-methyl groups” of methylene blue used in JP 55-079441 to Karasawa *et al.* with a reasonable expectation of success.

- Applicants' Response

Applicants respectfully traverses the rejection of claims 4 – 14 and 22 – 24 under 35 U.S.C. §103(a) as being patentable over JP 55-079441 to Karasawa *et al.* in light of Taylor,

“Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960) in part on the argument that one of ordinary skill in the art would NOT be motivated to combine the references in the manner cited by the Examiner.

Applicant notes that the Examiner has provided no specific motivation for combining the reference in the manner he suggests. Further, he provides no motivation for even looking for compounds that activate within the asserted wavelengths. Respectfully, vague references to both references asserting dyes, and that one might apply to the dyes of Taylor to the disclosure of Karasawa *et al.* does not provide the motivation necessary under the law. The Examiner’s rejection must fail as sheer hindsight reasoning.

- Claims 1, 14 – 15 and 21 – FIRST OBVIOUSNESS REJECTION
- Examiner’s Stance

The Examiner rejections claims 1, 14 – 15 and 21 under 35 U.S.C. §103(a) over JP 55-079441 to Karasawa *et al.* over U.S. Patent No. 5,815,484 to Smith *et al.*, in view of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960). The Examiner asserts U.S. Patent No. 5,815,484 to Smith *et al.* “teach the use of various phenothiazines including methylene blue and toluidine blue O in the copy protection of optical recording medi.” The Examiner asserts that it “would have been obvious to use other alkyl groups, such as ethyl or propyl moieties” as disclosed by Taylor “with a reasonable expectation of success.” The Examiner asserts that the instant application and the prior art of record “both rely on coloration of a dye to preclude accessing the recording medium form that side” and that “[t]he instant claims do not preclude the presence of oxygen to ensure the coloration of the thiazine dye.”

- Applicants’ Response

Applicants respectfully traverses the rejection of claims 1, 14 – 15 and 21 under 35 U.S.C. §103(a) over JP 55-079441 to Karasawa *et al.* over U.S. Patent No. 5,815,484 to Smith *et al.*, in view of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960) in part on the failure of the Examiner to recite adequate motivation for the combination.

The Examiner's argument once more appears to boil down to an assertion that any teaching of a phenothiazine dye on an optical recording medium makes obvious the present claims. The Examiner entirely ignores the composition limitations of claims 1, 14 – 15 and 21 finding it obvious to try such compounds. Further the Examiner ignores the application limitations of claim 1, and instead treats the method elements as inconsequential. Instead the Examiner asserts a “reasonable expectation of success” without indicating what is the successful resolution the reference's make obvious. Applicants respectfully have no understanding as to what the Examiner statements “both rely upon the coloration of the dye” and “[t]he instant claims do not preclude the presence of oxygen to ensure the coloration of the thiamine dye” mean in terms of the claims rejected. At a total loss for explanation, the Applicants assert that the Examiner is once more just using hindsight reasoning to make an approximation of the claimed subject matter.

- Claims 1, 14 – 15 and 21 – SECOND OBVIOUSNESS REJECTION
- Examiner's Stance

Possibly understanding the tenuous grounds of rejection of claims 1, 14 – 15 and 21 under the above 35 U.S.C. §103(a) reasoning, the Examiner also rejects the very claims under 35 U.S.C. §103(a) over JP 55-079441 to Karasawa *et al.* over U.S. Patent No. 5,815,484 to Smith *et al.*, in view of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960) and WO 02/03386 to Selinfreund *et al.*

The Examiner asserts that Selinfreund *et al.* WO 02/03386 “teaches with respect to figure 8, the optical recording medium where the light sensitive materials affects authentication being provided over the entire medium, on one surface of the medium or at predetermined areas.” The Examiner notes that the use of methylene blue with DVD media is disclosed in table 1, page 21, of the specification. The Examiner asserts that it would have been obvious to one skilled in the art looking at Selinfreund *et al.* WO 02/03386 to use dyes such as disclosed in Taylor in place of the methylene blue of Smith *et al.* and Selinfreund *et al.* in a “reactive layer adjacent the pits and the reflective layer” as taught by Smith *et al.*

- Applicants' Response

Applicants respectfully traverses the rejection of claims 1, 14 – 15 and 21 under 35 U.S.C. §103(a) over JP 55-079441 to Karasawa *et al.* in view of U.S. Patent No. 5,815,484 to Smith *et al.*, Selinfreund *et al.* WO 02/03386, and Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960) in part on the failure of the Examiner to recite adequate motivation for the combination.

Finding that the Selinfreund *et al.* WO 02/03386 reference adds nothing to the Examiner’s obviousness arguments, Applicants repeat their arguments made above with respect to the rejection of claims 1, 14 – 15 and 21 under 35 U.S.C. §103(a) over JP 55-079441 to Karasawa *et al.* over U.S. Patent No. 5,815,484 to Smith *et al.*, in view of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960). The Examiner’s citation to the teaching in WO 02/03386 of methylene blue only further proves the unobviousness of the claimed embodiments given how methylene blue was found by the present inventors to work in a typical DVD coating as iterated at [00015] of the specification.

- Claims 1, 14 – 15 and 21 – THIRD OBVIOUSNESS REJECTION
- Examiner’s Stance

The Examiner yet again rejects claims 1, 14 – 15 and 21 under 35 U.S.C. §103(a). This time his rejection rests on Selinfreund *et al.* WO 02/03386 in view of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960) alone.

The Examiner asserts that Selinfreund *et al.* WO 02/03386 in claims 36 – 52 teaches an optical recording medium “where the light sensitive materials which affects authentication being provided over the entire medium which is then coated with a reflective layer ... [and] “use of methylene blue with DVD media.” The Examiner asserts that “[i]t would have been obvious to one skilled in the art to art [sic] to modify the embodiment of claims 36-52 by using other alkyl groups, such as ethyl or propyl disclosed by Taylor ... in place of at least

one of the methyl groups of the methylene blue used by Selinfreund et al. '631 with a reasonable expectation of success.”

- Applicants' Response

Applicants respectfully traverses the rejection of claims 1, 14 – 15 and 21 under 35 U.S.C. §103(a) over Selinfreund *et al.* WO 02/03386 in view of Taylor, “Chromatic separation and isolation of metachromic dyes,” J. Histochemistry and Cytochemistry, Vol. 8 pp. 248 -257 (1960) in part on the failure of the Examiner to recite adequate motivation for the combination.

The Examiner’s argument herein boils down to an argument of “obvious-to-try.” Obvious-to-try is not the standard for obviousness. The Examiner’s recitation of a “reasonable expectation of success,” is once more clearly no more than hindsight reasoning. The Examiner makes no mention throughout the Office Action as to what “success” he is referencing. Why would one change from methylene blue and seek compositions with such activation profiles given the reference? Again, the Examiner is silent on this issue. Respectfully, the Examiner has failed to make out even a *prima facie* case of obviousness.

- Rejection under Judicially Created Doctrine of Obviousness-type Double Patenting

- Examiner's Position

The Examiner has rejected all of the claims, claims 1- 24, provisionally under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1 – 17 of copending Application No. 10/641,784 (US 2004/0110088). The Examiner argues that the “subject matters overlaps [sic] and it would hgave [sic] been obvious to use the propylene blue compounds based upon the direction in claims 8 to the substuents [sic] being propyl or hexyl.”

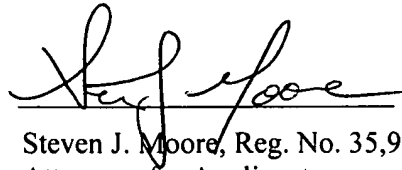
- Applicants' Response

Applicants respectfully request that the Examiner hold this provisional rejection in abeyance until patentable claims are to be issued in this or copending application No. 10/641,784. Applicant if necessary will file an appropriate terminal disclaimer.

CONCLUSION TO REMARKS

Applicants assert that this response is fully responsive to the Examiner's Office Action dated March 24, 2006. Applicants respectfully seek early allowance of the pending claims.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Steven J. Moore", is written over a horizontal line.

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VI. APPENDIX

- *No appendix is intended to be attached*